

ABSTRACT OF THE DISCLOSURE

5 A force feedback wheel is provided on a mouse or other interface device manipulated by
a user. A sensor detects a position of the mouse in a workspace and sends a position signal to a
connected host computer indicating that position. A rotatable wheel is mounted upon the
manipulandum and rotates about a wheel axis, where a wheel sensor provides a wheel signal to
the host computer indicating a rotary position of the wheel. A wheel actuator coupled to the
rotatable wheel applies a computer-modulated force to the wheel about the wheel axis. The
10 mouse can be a standard mouse or a force-feedback mouse, where forces are applied in the
mouse workspace. The host computer is preferably running a graphical environment, where the
force applied to the wheel can correspond with an event or interaction displayed in the graphical
environment. The wheel can also be included on other devices such as remote controls and
15 radios.